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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,520	10/26/2005	Fabrizio Donazzi	05788.0345-00000	5774
22852 7590 08/13/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER MAYO III, WILLIAM H	
			ART UNIT 2831	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,520

Applicant(s)

DONAZZI ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>May 31, 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed May 31, 2007 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 56-57 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for resilient members penetrating ferromagnetic material, does not reasonably provide enablement for penetrating ferromagnetic material without forming through holes in the base and cover. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Specifically, such claim language is confusing because if the resilient members penetrate the ferromagnetic material, clearly there is a through hole made in the cover and base of the material. If there is no indentation or hole made, they the resilient member has not penetrated the ferromagnetic material. The applicant is required to

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cancel such claim language because the specification nor the drawings enable such claim language.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 28-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siewerth (DE Pat Num 27 10620) in view of in view of Fasterding et al (DE Pat Num 3447836A1, herein referred to as Fasterding). Siewerth discloses an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3). Specifically, with respect to claim 28, Siewerth discloses an electrical power transmission line (Fig 1) comprising at least one electrical cable (not shown), a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints (Page 6). With respect to claim 29, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1), and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 35, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6). With respect to claim 36, Siewerth discloses that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7). With respect to claim 37, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each

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other (Fig 1): With respect to claim 39, Siewerth discloses that the ferromagnetic material may be steel (Page 6). With respect to claim 41, Siewerth discloses that at least two of said longitudinal sections (5) extend along different directions (Fig 1), wherein said conduit (1) comprises a joining member (7) for joining said two conduit sections (5), and wherein said joining member (7) consists of two parts electrically connected by means of said electrical contact elements (Pages 6-7). With respect to claim 42, Siewerth discloses that said base portion (at 2) has a "U-shaped cross-section (Fig 1). With respect to claim 43, Siewerth discloses that the cover portion (at 4) is substantially flat (Fig 1). With respect to claim 44, Siewerth discloses that the conduit (1) is placed underground (Fig 5). With respect to claim 45, Siewerth discloses that the material having a magnetic permeability greater than air is positioned between said superimposed portions of said base (at 2) and said cover (at 4). With respect to claim 46, Siewerth discloses a method of screening an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission lines are laid underground (Page 3), wherein the transmission line (Fig 1) comprises at least one electrical cable (not shown) being placed in a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and providing electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints (Page 6). With respect to claim 49, Siewerth discloses that the base (at 2) and said cover (at 4) have superimposed portions on both sides of said conduit (Fig 1),

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and wherein said electrical contact elements (5) are applied to said superimposed portions (Page 6). With respect to claim 50, Siewerth discloses that the conduit (1) comprises a plurality of longitudinal sections (5) partially superimposed on each other and each comprising a base portion (at 2) and a cover portion (at 4, Page 6), through metal fusion (Page 6). With respect to claim 51, Siewerth discloses that longitudinal sections (5) are electrically coupled to each other (at 7, Page 7) through metal fusion (Page 6). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1). With respect to claim 54, Siewerth discloses that the cover portion (at 4) and the base portion (at 7) each have longitudinal sections (5) which are longitudinally shifted from each other (Fig 1). With respect to claim 53, Siewerth discloses a method wherein the conduit (1) is placed underground (Fig 5), wherein the cover (at 4) is leaned over the base (at 2) to close the conduit (1). With respect to claim 56, Siewerth discloses that a conduit (1) comprising a first ferromagnetic material of the base (at 2) and a second ferromagnetic material of the cover (at 4). With respect to claims 56-57, Siewerth discloses that the electrical contact element combines the first ferromagnetic material of the base (at 2) and a second ferromagnetic material of the cover (at 4) without forming through holes in the base (at 2) and the cover (at 4) wherein said electrical contact elements (5) are selected from the group of metal fusion joints (Page 6). With respect to claim 58, Siewerth discloses a method of screening an electrical power transmission line (Figs 1-9) comprising a protective cover for producing a protection systems against strong magnetic fields, wherein the power transmission

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lines are laid underground (Page 3), wherein the transmission line (Fig 1) comprises at least one electrical cable (not shown) being placed in a conduit (1) of ferromagnetic material enclosing said at least one cable (not shown) and comprising a base (at 2) and a cover (at 4) and providing electrical contact elements (5) electrically connecting said base (at 2) and said cover (at 4), wherein said electrical contact elements (5) are selected from the group of metal fusion joints (Page 6).

However, Siewerth doesn't specifically disclose the electrical contact elements are selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material (claims 28 & 46), nor the contact elements being metallic clips made of ferromagnetic material (claims 30 & 52).

Fasterding discloses a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract). Specifically, with respect to claims 28, 30, 46, & 52, Fasterding discloses a protective system (Fig 2) comprising at least one electrical conductor (13) being inserted in a conduit (1) comprising a base element (at 1) and a cover (5), wherein the base (1) and cover (5) are joined by contact elements (6) made of ferromagnetic material (i.e. steel, abstract), which are capable of penetrating said ferromagnetic material.

With respect to claims 30 & 52, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective conduit of Siewerth to comprise the contact elements configuration as taught by Fasterding because Fasterding teaches that such a configuration provides a

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protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract).

Modified Siewerth also doesn't specifically disclose the superimposed portion having a width that is at least five times greater than the thickness of the air gap (claim 31), nor the air gap being 3% of the perimeter (claim 32), nor the contact elements having a reciprocal longitudinal distance of at most 50 cm (claim 34), nor the longitudinal section being superimposed at a length of at least 25% (claim 38), nor the electrical connection having a conductance of 150S/m (claims 46 & 58), nor the electrical connection having a conductance of 500S/m (claim 47), nor the electrical connection having a conductance of 1500S/m (claim 48).

With respect to claims 31-32, 34, 38, 38, 46-47, and 58, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the protective device of modified Siewerth to comprise the superimposed portion having a width that is at least five times greater than the thickness of the air gap, the air gap being 3% of the perimeter, the contact elements having a reciprocal longitudinal distance of at most 50 cm, the longitudinal section being superimposed at a length of at least 25%, and the electrical connection having a conductance of at least 150S/m, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

8. Applicant's arguments filed May 31, 2007 have been fully considered but they are not persuasive. Specifically, the applicant argues that:

- A) That Fasterding doesn't disclose resilient members that are suitable to penetrate the ferromagnetic material because Fasterding lacks any disclosure to "advantageously carry out a localized cleaning action on the coupling surface during application of joining member by removing any oxide, dirt, sand, and loose material present on the surface".
- B) A proper prima facie case of obviousness has not been established and therefore the rejection should be withdrawn.
- C) The combination doesn't teach the limitation of "having a conductance of at least 150 Siemens/m".
- D) Fasterding doesn't disclose the resilient members being clips and therefore cannot be properly combined with Siewerth.
- E) Neither Fasterding nor Siewerth disclose the resilient members that are elastically joining the base with the cover.

With respect to argument A, the examiner respectfully traverses. It is improper to individually attack references when the rejections are based on the combined teachings of both references. Specifically, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically, Siewerth clearly teaches all of

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the claimed limitations except the electrical contact elements being selected from the group of metal fusion joints and resilient members suitable to penetrate said ferromagnetic material and the contact elements being metallic clips made of ferromagnetic material. Fasting clearly teaches a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract) wherein the protective system (Fig 2) comprising at least one electrical conductor (13) being inserted in a conduit (1) comprising a base element (at 1) and a cover (5), wherein the base (1) and cover (5) are joined by contact elements (6) made of ferromagnetic material (i.e. steel, abstract), which are capable of penetrating said ferromagnetic material. Clearly the drawings illustrate the pins (6) being inserted through the ferromagnetic material of the cover and base. Therefore, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the protective conduit of Siewerth to comprise the contact elements configuration as taught by Fasting because Fasting teaches that such a configuration provides a protective conduit (Figs 1-6) that is of lower weight, easily installed, and prevents damage to interior components, such as a cable, from weather influences (abstract).

With respect to argument B, the examiner respectfully traverses. The examiner is governed by the MPEP in order to ensure a proper prima facie case of obviousness.

Specifically, the MPEP states the following::

ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation,

either in the references themselves or in the knowledge generally or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

Clearly, as disclosed above, there exist a motivation to modify the conduit of Siewerth with the contact elements of Fasterding. Clearly, there exist a reasonable expectation of success, because both conduits are in the same field of endeavor and have the same problem solving areas and clearly the contact elements of Fasterding would not effect the propose or utility of the conduit of Siewerth. Thirdly, all of the claimed subject matter is disclosed in the combination of both references. Therefore, there does exist a proper prima facie case of obviousness. In light of the above comments, the examiner respectfully submits that the 35 USC 103(a) rejection are proper and just.

With respect to argument C, the examiner respectfully traverses. Firstly, the courts have also been consistent that functional language doesn't differentiate the claimed invention from the prior art, if all of the structural limitations of the claimed invention are disclosed in the prior art references. Specifically, the MPEP teaches:

2114 [R-1] Apparatus and Article Claims — Functional Language

For a discussion of case law which provides guidance in interpreting the functional

portion of means-plus-function limitations see MPEP § 2181 - § 2186.

APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE
FROM THE PRIOR ART

>While features of an apparatus may be recited either structurally or functionally, claims<
directed to >an< apparatus must be distinguished from the prior art in terms of structure
rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429,
1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to
function did not defeat the Board's finding of anticipation of claimed apparatus because
the limitations at issue were found to be inherent in the prior art reference); see also In re
Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971);< In re
Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims
cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch &
Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis
in original).

Based on the above guidelines, the examiner respectfully submits, that all of the
structural limitations of the claimed invention are disclosed in the prior art reference and
therefore must be capable of performing the same functions and be utilized in the same
manner. If some different structure is responsible for performing the function of the
claimed invention, then the applicant has to claim the different structure to differentiate
the claimed invention from the prior art. Although the claims are interpreted in light of
the specification, limitations from the specification are not read into the claims. See *In*
re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to argument D, the examiner respectfully traverses. Firstly, it must
be stated that the examiner is required to give the claims the broadest reasonable
interpretation. Specifically, MPEP 2111 states:

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During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).< Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Given the above guidelines, the examiner respectfully submits that while Fasterding clearly teaches the use of clamps (see claim 6), based on the general definition of a clip as defined by Riverside Websters II New College Dictionary

Clip-a device for gripping; clasp

Clearly, a clamp of Fasterding is a device for gripping or could be considered a clasp since it is utilized to fasten the top and cover together. Therefore, given the guidelines above, Fasterding clearly teaches disclose the resilient members being clips (i.e. a device for gripping) and therefore can be properly combined with Siewerth as disclosed above with respect to arguments B & C.

With respect to argument E, the examiner respectfully traverses. As stated above, the examiner has a duty to interpret the claims with the broadest reasonable consistent with the specification. Fasterding clearly teaches that the joining of the base to the cover creates expansion joints, wherein the expansion joints can simultaneously develop thermal expansion (Page 9, paragraph 2, lines 1-8). Clearly, there cannot exist expansion with the resilient members elastically joining the base and cover.

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Specifically, if the joining of the cover with the base was a rigid joint, there would be not expansion. Such a conclusion is proper. Specifically, the MPEP states the following:

It is proper to rely on a conclusion of obviousness "from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Jacoby, 309 F. 2d 513, 516 135 USPQ 317, 319 (CCPA 1962). The artisan must be presumed to know something about the art apart from what the references expressly disclose. In re Sovish, 769 F. 2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). A rejection of obviousness involves consideration of the ordinary skill in the art, and it is wrong to presume stupidity rather than skill.

For the reason stated above, the 35 USC 103(a) rejection of claims 28-58 is proper and just.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III

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July 31, 2007